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| 09/649,133      | 08/28/2000  | MASAAKI KIDO         | DP-662-US           | 8136             |

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EXAMINER

MILLER, BRANDON J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2683

13

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/649,133

Applicant(s)

KIDO, MASA AKI

Examiner

Brandon J Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**Continuation of Disposition of Claims: Claims pending in the application are**  
1,2,4,5,7,8,10,11,13,14,16,17,19,20,22,23,26,28,29,31,32,34,35,37,38,40,41,43 and 44.

**Continuation of Disposition of Claims: Claims rejected are**  
1,2,4,5,7,8,10,11,13,14,16,17,19,20,22,23,25,26,28,29,31,32,34,35,37,38,40,41,43 and 44.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/21/04 has been entered.

### ***Response to Amendment***

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen and Hashimoto.

Regarding claim 1 Nguyen teaches a mobile radio communication system in which location-limited mobile stations can be used (see abstract and pg. 3, lines 8-14). Nguyen teaches a registration area storage in which information concerning registered areas, which have been registered as areas where a location-limited mobile station is allowed to originate a call, is stored with regard to each location-limited mobile station (see pg. 3, lines 27-30). Nguyen teaches a registration area search for referring to the registered area storage means and thereby searching for the registered areas of a location-limited mobile station when the location-limited mobile

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station originated a call (see pg. 3, lines 28-33). Nguyen teaches an area comparison for comparing the registered areas of the location-limited mobile station searched by the registered area search with present location areas of the location-limited mobile station and thereby judging whether or not a match occurred between the registered areas and the present location areas; and a connection establishment for executing a connection establishment process for the location-limited mobile station if a match occurred in the judgment by area comparison (see pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach registered areas of each location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period. Hashimoto teaches registered areas of a location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include registered areas of each location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 4 Nguyen teaches a mobile radio communication system in which location-limited mobile stations can be used (see abstract and pg. 3, lines 8-14). Nguyen teaches a registration area storage in which information concerning registered areas, which have been registered as areas where a location-limited mobile station is allowed to conduct communication, is stored with regard to each location-limited mobile station (see pg. 3, lines 27-30). Nguyen teaches a present location area tracking for keeping track of present location areas of a location-

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limited mobile station when the location-limited mobile station is conducting communication (see pg. 7, lines 28-33). Nguyen teaches a registration area search for referring to the registered area storage means and thereby searching for the registered areas of a location-limited mobile station (see pg. 3, lines 28-33). Nguyen teaches an area comparison for comparing the registered areas of the location-limited mobile station searched by the registered area search with present location areas of the location-limited mobile station tracked and thereby judging whether or not a match occurred between the registered areas and the present location areas; and a disconnection establishment for disconnecting the communication conducted by the location-limited mobile station if no match occurred in the judgment by area comparison (see pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach registered areas of each location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period. Hashimoto teaches registered areas of a location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include registered areas of each location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 7 Nguyen teaches a mobile radio communication system in which location-limited mobile stations can be used (see abstract and pg. 3, lines 8-14). Nguyen teaches a registration area storage in which information concerning registered areas, which have been registered as areas where a location-limited mobile station is allowed to receive an incoming call,

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is stored with regard to each location-limited mobile station (see pg. 3, lines 27-30). Nguyen teaches a registration area search for referring to the registered area storage means and thereby searching for the registered areas of a location-limited mobile station when an incoming call to the location-limited mobile station occurred (see pg. 3, lines 28-33). Nguyen teaches an area comparison for comparing the registered areas of the location-limited mobile station searched by the registered area search with present location areas of the location-limited mobile station tracked and thereby judging whether or not a match occurred between the registered areas and the present location areas; and a connection establishment process for the location-limited mobile station if a match occurred in the judgment by area comparison (see pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach registered areas of each location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period. Hashimoto teaches registered areas of a location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include registered areas of each location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 10 Nguyen teaches a mobile radio communication system in which location-limited mobile stations can be used (see abstract and pg. 3, lines 8-14). Nguyen teaches a registration area storage in which information concerning registered areas, which have been registered as areas where a location-limited mobile station is allowed to receive an incoming call,

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is stored with regard to each location-limited mobile station (see pg. 3, lines 27-30). Nguyen teaches a registration area search for referring to the registered area storage means and thereby searching for the registered areas of a location-limited mobile station when an incoming call to the location-limited mobile station occurred (see pg. 3, lines 28-33). Nguyen teaches paging a base transceiver station corresponding to the registered areas page the location-limited mobile station in the registered areas; and a connection establishment process for the location-limited mobile station if a match occurred in the judgment by area comparison (see pg. 5, lines 22-26, pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach registered areas of a location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period. Hashimoto teaches registered areas of each location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include registered areas of each location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 13 Nguyen teaches a mobile radio communication system in which location-limited mobile stations can be used (see abstract and pg. 3, lines 8-14). Nguyen teaches a registration area storage in which information concerning registered areas, which have been registered as areas where a location-limited mobile station is allowed to receive an incoming call, is stored with regard to each location-limited mobile station (see pg. 3, lines 27-30). Nguyen



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teaches letting a base transceiver stations page a location-limited mobile station when an incoming call to the location-limited mobile station occurred (see pg. 5, lines 22-26, pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen teaches a registration area search for referring to the registered area storage means and thereby searching for the registered areas of a location-limited mobile station (see pg. 3, lines 28-33). Nguyen teaches a connection establishment process for the location-limited mobile station if the location-limited mobile station made a response to the paging from its registered areas (see pg. 5, lines 22-26, pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach registered areas of each location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period. Hashimoto teaches registered areas of a location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include registered areas of each location-limited mobile station that are altered to alternative registered areas during a preset time period that is defined prior to entry into the time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 16 Nguyen teaches a mobile radio communication system in which location-limited mobile stations can be used (see abstract and pg. 3, lines 8-14). Nguyen teaches a registration area search in which information concerning registered areas which have been registered as areas where a location-limited mobile station is allow to originate a call is stored with regard to each location-limited mobile station, is referred to and thereby the registered areas of a location-limited mobile station is searched for when the location-limited mobile station

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originated a call (see pg. 3, lines 27-34). Nguyen teaches an area comparison for comparing the registered areas of the location-limited mobile station searched by the registered area search with present location areas of the location-limited mobile station and thereby whether or not a match occurred between the registered areas and the present location areas is judged; and a connection establishment for executing a connection establishment process is executed for the location-limited mobile station if a match occurred by area comparison (see pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period. Hashimoto teaches a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 19 Nguyen teaches a mobile radio communication system in which location-limited mobile stations can be used (see abstract and pg. 3, lines 8-14). Nguyen teaches a present location areas of a location-limited mobile station are kept track of when the location-limited mobile station is conducting communication (see pg. 7, lines 28-33). Nguyen teaches a registration area storage in which information concerning registered areas, which have been

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registered as areas where a location-limited mobile station is allowed to conduct communication, is stored with regard to each location-limited mobile station, is referred to and thereby the registered areas of the location-limited mobile station is searched for (see pg. 3, lines 27-30). Nguyen teaches an area comparison for comparing the registered areas of the location-limited mobile station searched by the registered area search with present location areas of the location-limited mobile station tracked and thereby whether or not a match occurred between the registered areas and the present location areas is judged; and a disconnection establishment for disconnecting the communication conducted by the location-limited mobile station if no match occurred by area comparison (see pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period. Hashimoto teaches a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 22 Nguyen teaches a mobile radio communication system in which location-limited mobile stations can be used (see abstract and pg. 3, lines 8-14). Nguyen teaches

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a registration area search in which information concerning registered areas which have been registered as areas where a location-limited mobile station is allow to receive an incoming call is stored with regard to each location-limited mobile station, is referred to and thereby the registered areas of a location-limited mobile station is searched for when an incoming call to the location-limited mobile station occurred (see pg. 3, lines 27-34). Nguyen teaches an area comparison for comparing the registered areas of the location-limited mobile station and thereby whether or not a match occurred between the registered areas and the present location areas is judged; and a connection establishment for executing a connection establishment process is executed for the location-limited mobile station if a match occurred by area comparison (see pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period. Hashimoto teaches a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 25 Nguyen teaches a mobile radio communication system in which location-limited mobile stations can be used (see abstract and pg. 3, lines 8-14). Nguyen teaches

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a registration area search in which information concerning registered areas which have been registered as areas where a location-limited mobile station is allow to receive an incoming call is stored with regard to each location-limited mobile station, is referred to and thereby the registered areas of a location-limited mobile station is searched for when an incoming call to the location-limited mobile station occurred (see pg. 3, lines 27-34). Nguyen teaches a location-limited mobile station that is paged in the registered areas; and a connection establishment process is executing for the location-limited mobile station if the location-limited mobile station made a response to the paging (see pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period. Hashimoto teaches a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 28 Nguyen teaches a mobile radio communication system in which location-limited mobile stations can be used (see abstract and pg. 3, lines 8-14). Nguyen teaches a paging step in which a location-limited mobile station is paged when an incoming call to the

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location-limited mobile station occurred (see pg. 7, lines 33-37). Nguyen teaches a registration area search in which a registered area storage means, in which information concerning registered areas, which have been registered as areas where a location-limited mobile station is allowed to receive an incoming call, is stored with regard to each location-limited mobile station, is referred to and thereby the registered areas of the location-limited mobile station is searched for (see pg. 3, lines 28-33); and a connection establishment process for the location-limited mobile station if the location-limited mobile station made a response to the paging from its registered areas (see pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period. Hashimoto teaches a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 31 Nguyen teaches a machine-readable record medium storing a program for instructing a machine, a computer unit etc. to execute a mobile radio communication system in which location-limited mobile stations can be used (see abstract, pg. 3, lines 8-14 & 27-33 and FIG. 4). Nguyen teaches a registration area search in which a registered area storage

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means, in which information concerning registered areas which have been registered as areas where a location-limited mobile station is allow to originate a call is stored with regard to each location-limited mobile station, is referred to and thereby the registered areas of a location-limited mobile station is searched for when the location-limited mobile station originated a call (see pg. 3, lines 27-34). Nguyen teaches an area comparison for comparing the registered areas of the location-limited mobile station searched by the registered area search with present location areas of the location-limited mobile station and thereby whether or not a match occurred between the registered areas and the present location areas is judged; and a connection establishment for executing a connection establishment process is executed for the location-limited mobile station if a match occurred by area comparison (see pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period. Hashimoto teaches a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

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Regarding claim 34 Nguyen teaches a machine-readable record medium storing a program for instructing a machine, a computer unit etc. to execute a mobile radio communication system in which location-limited mobile stations can be used (see abstract, pg. 3, lines 8-14 & 27-33 and FIG. 4). Nguyen teaches a present location areas of a location-limited mobile station are kept track of when the location-limited mobile station is conducting communication (see pg. 7, lines 28-33). Nguyen teaches a registration area storage in which information concerning registered areas, which have been registered as areas where a location-limited mobile station is allowed to conduct communication, is stored with regard to each location-limited mobile station, is referred to and thereby the registered areas of the location-limited mobile station is searched for (see pg. 3, lines 27-30). Nguyen teaches an area comparison for comparing the registered areas of the location-limited mobile station searched by the registered area search with present location areas of the location-limited mobile station tracked and thereby whether or not a match occurred between the registered areas and the present location areas is judged; and a disconnection establishment for disconnecting the communication conducted by the location-limited mobile station if no match occurred by area comparison (see pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period. Hashimoto teaches a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include a preset time period



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defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 37 Nguyen teaches a mobile radio communication system in which location-limited mobile stations can be used (see abstract and pg. 3, lines 8-14). Nguyen teaches a registration area search in which information concerning registered areas which have been registered as areas where a location-limited mobile station is allow to receive an incoming call is stored with regard to each location-limited mobile station, is referred to and thereby the registered areas of a location-limited mobile station is searched for when an incoming call to the location-limited mobile station occurred (see pg. 3, lines 27-34). Nguyen teaches an area comparison for comparing the registered areas of the location-limited mobile station and thereby whether or not a match occurred between the registered areas and the present location areas is judged; and a connection establishment for executing a connection establishment process is executed for the location-limited mobile station if a match occurred by area comparison (see pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period. Hashimoto teaches a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include

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a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 40 Nguyen teaches a machine-readable record medium storing a program for instructing a machine, a computer unit etc. to execute a mobile radio communication system in which location-limited mobile stations can be used (see abstract, pg. 3, lines 8-14 & 27-33 and FIG. 4). Nguyen teaches a registration area search in which information concerning registered areas which have been registered as areas where a location-limited mobile station is allow to receive an incoming call is stored with regard to each location-limited mobile station, is referred to and thereby the registered areas of a location-limited mobile station is searched for when an incoming call to the location-limited mobile station occurred (see pg. 3, lines 27-34). Nguyen teaches a location-limited mobile station that is paged in the registered areas; and a connection establishment process is executing for the location-limited mobile station if the location-limited mobile station made a response to the paging (see pg. 7, lines 30-37 and pg. 8, lines 1-2 Nguyen does not teach a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period. Hashimoto teaches a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Nguyen adapt to include a preset time period defining

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step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Regarding claim 43 Nguyen teaches a machine-readable record medium storing a program for instructing a machine, a computer unit etc. to execute a mobile radio communication system in which location-limited mobile stations can be used (see abstract, pg. 3, lines 8-14 & 27-33 and FIG. 4). Nguyen teaches a paging step in which a location-limited mobile station is paged when an incoming call to the location-limited mobile station occurred (see pg. 7, lines 33-37). Nguyen teaches a registration area search in which a registered area storage means, in which information concerning registered areas, which have been registered as areas where a location-limited mobile station is allowed to receive an incoming call, is stored with regard to each location-limited mobile station, is referred to and thereby the registered areas of the location-limited mobile station is searched for (see pg. 3, lines 28-33); and a connection establishment process for the location-limited mobile station if the location-limited mobile station made a response to the paging from its registered areas (see pg. 7, lines 30-37 and pg. 8, lines 1-2). Nguyen does not teach a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period. Hashimoto teaches a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period (see col. 10, lines 20-30). It would have been obvious to one of ordinary skill in the art at

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the time the invention was made to make the Nguyen adapt to include a preset time period defining step in which a preset time period is defined during which alternative registered areas are effective, and including the alternative registration areas only during the preset time period because this would allow for a radio frequency communication system suitable for updating a radio affiliation database.

Claims 2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35, 38, 41, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen and Hashimoto and Yi.

Regarding claim 2 Nguyen and Hashimoto teach a device as recited in claim 1 except for a registered area storage designed so that the registered areas of each location-limited mobile station can be altered so as to change the total area of the registered areas. Hashimoto does teach verifying user area and making required corrections to the registration area (see col. 10, lines 34-35). Yi teaches the registered area storage designed so that the registered areas of each location-limited mobile station can be altered so as to change the total area of the registered areas (see col. 3, lines 53-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a registered area storage designed so that the registered areas of each location-limited mobile station can be altered so as to change the total area of the registered areas because this would allow for more efficient modifications to registration areas.

Regarding claim 5 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 8 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

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Regarding claim 11 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 14 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 17 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 20 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 23 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 26 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 29 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 32 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 35 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 38 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

Regarding claim 41 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

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Regarding claim 44 Yi teaches a device as recited in claim 2 and is rejected given the same reasoning as above.

***Response to Arguments***

Applicant's arguments with respect to claims 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, and 43 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dufour WO 96/34500 discloses a system and method for restricting mobility of subscribers assigned to fixed subscription areas in a cellular telecommunications network.

Iseyama et al. US 6,223,038 B1 discloses a location registration method for mobile radio communication system.

Nakagoshi et al. US 5,379,451 discloses a mobile communication system and location registration method in mobile communications system.

Minagawa US 6,510,318 discloses a method for location registration of mobile stations in a mobile communications system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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March 25, 2004



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